



Human
Development
Center
Building Capacity
Inspiring Change



Evidence based practices in behavior and social interaction for students with ASD

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LASARD



Participants will:

- Locate resources for evidence-based practices for students with ASD to support behavior and social interaction.
- Identify the steps to implement peer mediated intervention and functional communication training ***with fidelity.***



Introduction to the LASARD Project

Project Goals:

- (1) to improve educational practices and outcomes for students with autism spectrum disorders (ASD) and related disabilities and
- (2) to develop statewide capacity to provide high quality educational programs for these students.

From: <http://www.hdc.lsuhsce.edu/LASARD/>

How can we help you?

GO TO

www.hdc.lsuhsce.edu

to find:

Online Autism Training Modules:

Available online 24/7

- CEUs available upon successful completion of post-test

Web-based Workgroups

State-wide workshops :

Open Access Trainings:

October 11th (South)

October 18th (North)

Autism Summer Institute:

June 5th – 7th, 2012 in New Orleans.



Louisiana Autism Quality Indicators

Key Areas



Communication
Social Interaction
Behavior
Curriculum & Instruction
Environment
Inclusive Practices
Collaboration
Transition

<http://www.hdc.lsuhs.edu/>



National Professional Development Center on Autism Spectrum Disorders



autismpdc.fpg.unc.edu | autismpdc.fpg.unc.edu




THE NATIONAL PROFESSIONAL DEVELOPMENT CENTER ON AUTISM SPECTRUM DISORDERS

SEARCH

A multi-university center to promote the use of evidence-based practices for children and adolescents with autism spectrum disorders

- Home
- About the Center
- Evidence-Based Practices
- Additional Resources
- Working With States



During this 2007-2010 grant cycle, twelve states have been selected through a competitive application process for a two-year partnership with the National Professional Development Center (NPDC) on

- State Partners Login
- User name:
- Password:
- Need login help?

The National Professional Development Center on Autism Spectrum Disorders is a multi-university center to promote the use of evidence-based practice for children and adolescents with autism spectrum disorders. The Center operates through three sites that include the [FPG Child Development Institute](#) at the University of North Carolina at Chapel Hill, the [M.I.N.D. Institute](#) at University of California at Davis Medical School, and the [Waisman Center](#) at the University of Wisconsin at Madison. Each year, three states are selected through a competitive application process for a two-year partnership with the Professional Development Center. The Center works in coordination with each state's Department of Education, Part C agency, and University Center for Excellence in Developmental Disabilities to provide professional development to teachers and practitioners who serve individuals from birth through twenty-two years with autism spectrum disorders.

News and Events

- New presentations posted in Additional Resources
- Journal articles published by NPDC staff



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<http://autismpdc.fpg.unc.edu/> (1 of 2) [10/13/2010 11:08:54 AM]

autismpdc.fpg.unc.edu



To be considered an evidence-based practice (EBP) by The National Professional Development Center on ASD, efficacy must be established through peer-reviewed research in scientific journals using:

- *randomized or quasi-experimental design studies.* Two high quality experimental or quasi-experimental studies,
- *single-subject design studies.* Three different researchers must have conducted five high quality single subject design studies, or
- *combination of evidence.* One high quality randomized or quasi-experimental group design study and three high quality single subject design studies conducted by at least three different investigators or research groups.

National Professional Development Center on Autism Spectrum Disorders, 2010

Evidence Based Practices



- Computer-aided instruction
- Differential reinforcement
- Discrete trial training
- Extinction
- Functional behavior assessment
- Functional communication training
- Naturalistic interventions
- Parent-implemented intervention
- Peer-mediated instruction/intervention
- Picture Exchange Communication System™
- Pivotal response training
- Prompting
- Reinforcement
- Response interruption/redirection
- Self-management
- Social narratives
- Social skills training groups
- Speech generating devices
- Stimulus control
- Structured work systems
- Task analysis
- Time delay
- Video modeling
- Visual supports

National Professional Development Center on Autism Spectrum Disorders



For improving Social Interaction skills

- Peer-Mediated Instruction and Intervention (PMII)
- Naturalistic Intervention
- Picture Exchange Communication (PECS)
- Pivotal Response Training (PRT)
- Self-Management
- Discrete Trial Training (DTT)
- Social Narratives
- Social Skills groups
- Task Analysis
- Time Delay
- Video Modeling
- Visual Supports





- Studies have concluded:
 - Individuals with ASD experience more loneliness than nondisabled peers. (Bauminger & Kasari, 2000)
 - Students with ASD would like more satisfying social peer interactions, but do not know how to do so. (Bauminger, Shulman, & Agam, 2003)





Benefits of Peer Mediated Interventions (PMI)



- Foster positive interactions to enhance peers' social perceptions of student with ASD and acceptance of student into peer groups.
- Increased opportunities to practice skills in natural, real life settings, which include natural interruptions and distractions.
- Natural peer social reinforcers and feedback
- Possible spill-over effects to untrained peers

Thiemann & Kamps (2008)



Benefits for Trained Peers



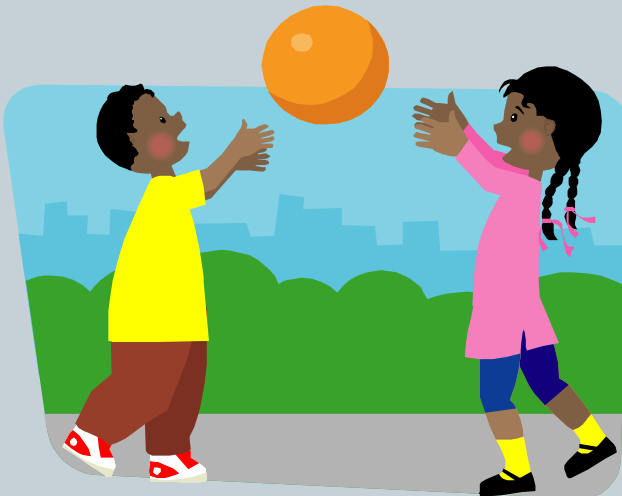
- Lasting friendships
- Sense of accomplishment and personal growth
- Appreciation for diversity and individual differences
- Increased self-confidence and responsibility
- Additional attention and feedback from adults

Carter, Cushing, & Kennedy (2009)

Peer Buddies vs. PMI

Peer Buddies

- No instruction
- No feedback
- Lack of research



PMI

- Well planned
- Systematic
- Includes instruction and feedback
- Supported by research

PMI can be used for:

- Social Skills
- Communication/
Language Skills
- Academic Skills



Steps to Peer Mediated Intervention

1. Selecting peers
2. Training peers
3. Supporting peers
4. Plan for implementation
5. Implementation
6. Generalization

Data collection throughout!



Adapted from Neitzel
(2008)

Selecting Peers



- Good social skills
- Well-liked by peers
- Willing to participate



- Clubs
- Volunteers
- Teacher nomination



Neitzel (2008)

Training peers: Identify target skills



- Initiating interactions
- Responding to the target student
- Keeping an interaction going
- Greetings
- Topics to discuss
- Turn taking and sharing
- Compliments
- Helping others
- Including others in activities



Neitzel (2008)



- Discuss similarities and differences between target student and trained peers.
- Discuss target student's form(s) of communication
- Likes and dislikes
- “Look, wait, and listen”
- Role play
 - Teacher provides feedback and reinforcement

Neitzel (2008)

Peer Training Plan



What?
Why?

Who?

How?

When?

- Rationale for PMI
- Brief description of student
- Description of goals
 - Supports necessary for each
- Role play and feedback
- Develop schedule

Supporting peers

- Weekly follow-up meetings to problem solve and discuss
- Any new supports are shared with peers
- Ideas for next week's goals, including topics of conversation, questions to target, data collection



Neitzel (2008)



Individualized Plan for PMI



Plan for Peer Training

Target student (initials only):

How will you find peers?

What current IEP goals/objectives would peers support?

Brief description of student	
Rationale for peer mediated intervention	
Description of goals and supports	
Role play/feedback/questions (Who will do it? What scenario will you use?)	
Develop schedule	



- Peer mediated interventions benefit both targeted students and their peers.
- PMI is a systematic way for peers to provide support to students with ASD and related disabilities.
- Training and follow-up support of peers are important for success with PMI.



Evidence-Based Practices



For improving Behavior Skills

- Antecedent-Based Interventions (ABI)
- Differentiated Reinforcement
- Discrete Trial Training
- Extinction
- Functional Behavior Assessment (FBA)
- Functional Communication Training (FCT)
- Parent-Implemented Interventions
- Picture Exchange Communication System (PECS)
- Pivotal Response Training
- Prompting
- Reinforcement
- Response Interruption/Redirection (RIR)
- Self-Management
- Social Narratives
- Structured Work Systems
- Task Analysis
- Visual Supports



Communicative Function of Behavior



- Challenging behavior occurs when individuals cannot adequately communicate their needs.
- The exhibited behavior becomes an effective means of communication.
- To the individual, the challenging behavior seems reasonable and logical.
- Behaviors are messages!



- Communication based intervention
- Reduces or eliminates problematic behavior by teaching the student a specific form of communication matched to the function of the problematic behavior
- Communicative form will replace problematic behavior because it is more efficient and effective



Carr, Levin, McConnachie, Carlson,
Kemp, & Smith (1994)

Functional Communication Training



- The goal of FCT is education, not simply behavior reduction.
 - Problematic behavior serves a function for the individual displaying it.
 - Goal of FCT is to teach the individual new ways of influencing other people so the problematic behavior is no longer necessary.



Carr, Levin, McConnachie, Carlson,
Kemp, & Smith (1994)

Steps for Implementation: FCT



1. Complete a functional behavior assessment of the challenging behavior.
2. Identify a replacement behavior as a substitute for the challenging behavior
3. Manipulate the environment to elicit the challenging behavior to provide opportunities to practice replacement behavior and plan opportunities for generalization
4. Prompt student to use replacement behavior
5. Do not reinforce challenging behavior and provide immediate reinforcement for use of replacement behavior
6. Shape the response
7. Fade the use of prompts
8. Increase the time between the replacement behavior and the reinforcement

Data collection throughout!

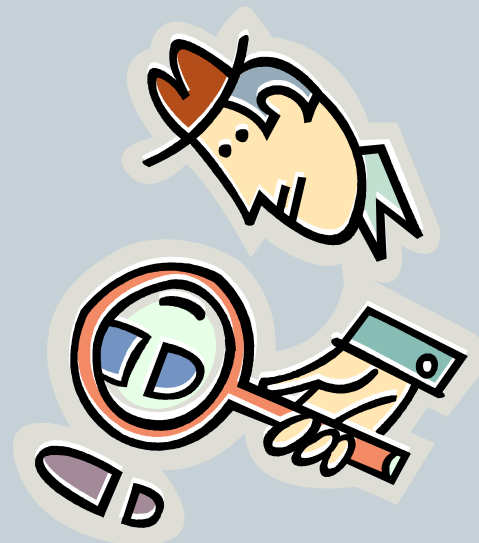
Adapted from Franzone (2009)



Step 1: Functional Behavior Assessment



- QUALITY Functional Behavior Assessment is crucial to the success of FCT!
- For more information on FBA:
 - NPDC-ASD Brief
 - LASARD Behavior Online Module



Step 2: Identify a replacement behavior



- Select form of communication (e.g., verbalization, sign, picture, AAC device) appropriate for the student
- Replacement behavior should:
 - Serve the same function as challenging behavior
 - Be easily taught
 - Be acceptable and appropriate for the environment and student
 - Be recognizable by multiple communicative partners
- Consider attention getting if necessary
 - Arm tapping, hand raising



Franzone (2009)



Steps 3, 4, & 5: Opportunities, prompts, and reinforcement



- Based on data, determine when the behavior typically occurs, and set up the situations for the student to practice the replacement behavior across people and environments.
- Determine appropriate prompting system.
- Remember response to the replacement behavior should be **more efficient** than the problematic behavior. Provide **immediate** reinforcement for use of replacement behavior and do not reinforce challenging behavior.

Franzone (2009)



Data Collection Example from NPDC-ASD



Interfering Behavior (IB): Tiffany hits peers when she wants toys they are playing with

Replacement Behavior (RB): Tiffany will say, "My turn" when she wants a toy that a peer is playing with

Date	Activity/ setting	Antecedent (record what happens right before the IB or RB)	IB or RB?	Prompts	Consequence (record what happens right after the IB or RB)	Notes
2/20	Free play	Peer picks up toy near Tiffany	RB	I P G V	Peer gave toy to Tiffany	
2/20	Free play	Peer sat near Tiffany with an animal	IB	I P G V	Peer started crying	
2/20	Small groups	No more brushes at painting activity	RB	I P G V	Peer gave Tiffany paintbrush	

Franzone (2009)

Tips to remember:



- Take advantage of any natural opportunities to encourage and acknowledge the replacement behavior
- Make certain ALL of the student's communicative replacement behaviors are honored
- The replacement behavior should be **at least** as effective for the student than the old challenging behavior
- Be persistent

Dunlap & Duda (2004)



Steps 6, 7, & 8: Fade, Shape, & Delay Reinforcement



- **Based on your data**, determine that the student is using the replacement behavior reliably with current supports before moving to the next steps.
- At first, any approximation of the replacement behavior are accepted, then reinforce closer approximations to the desired response.
- Fade to a less intrusive prompt level when student is consistently successful at current prompt level
- Systematically increase time between the replacement behavior and reinforcement

Franzone (2009)



- Based on data, determine what procedures may need to be revisited:
 - Is the correct function identified?
 - Is the replacement behavior efficient, appropriate, and recognizable?
 - Was the replacement behavior taught across people and environments?
 - Did everyone ignore, or make less efficient, the challenging behavior?

Mancil & Boman (2010)



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